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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/066,061 04/24/98 ZAVRACKY

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EXAMINER

NGUYEN, J

ART UNIT

PAPER NUMBER

2673

DATE MAILED: 01/12/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/066,061

Applicant(s)

ZAVRACKY ET AL.

Examiner

Jimmy H. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- 1) ☒ Responsive to communication(s) filed on 13 November 2000.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) 1-13, 15 and 18-24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14, 16, 17 and 25-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☒ The proposed drawing correction filed on 13 November 2000 is: a) ☒ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some * c) ☐ None of the CERTIFIED copies of the priority documents have been:
1. ☐ received.
2. ☐ received in Application No. (Series Code / Serial Number) _____.
3. ☐ received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

Attachment(s)

- 14) ☐ Notice of References Cited (PTO-892)
- 15) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 16) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.
- 17) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 18) ☐ Notice of Informal Patent Application (PTO-152)
- 19) ☐ Other:

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DETAILED ACTION

1. Claims 1-13, 15 and 18-24 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to non-elected species, the withdrawal of claims 15-24 being objected by the applicant in the amendment entered as Paper No. 14.

Applicant objecting the withdrawal of claims 15-24, as filed "Independence claim 14 ... allowed", page 5, lines 22-26, has been fully reconsidered but they are not persuasive, because a search and examination of the entire application would place a serious burden on the Examiner since the entire application discloses many distinct inventions, as stated in the last office action, i.e., in particular, a group of claims 19-24 drawn to non-elected invention discloses a method of writing an image to a LCD device which is classified in Class 345, Subclass 87; and claims 15-18 includes limitations only readable on non-elected species, e.g., an audio transducer device and components which make up a structure of a LCD device, which is classified in Class 349, Subclass 45. However, since the elected invention relates to a structure of a portable display system including a microdisplay such as a LCD device, and the independent claim 14 is amended to include a structure of the LCD device, Examiner agrees to consider the dependent claims including a structure of the LCD device as provided more detail for the structure of the portable display system as illustrated in figures 34's.

Therefore, claims 14, 16, 17 and 25-31 are considered.

Claim Rejections - 35 USC § 112

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2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 14, 16, 17 and 25-31 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

As per claims above, the specification, page 50, line 29 - page 51, line 21, and the figures 34A-34D do not teach the claimed limitations, "a housing having a volume of less than 330 cm³", as recited in independent claim 14, "the housing of the display unit has a volume of less than 250 cm³", as recited in claim 30, and "the housing of the display unit has a volume of less than 165 cm³", as recited in claim 31, but only teach a housing 604 on page 51, line 2. Therefore, these claims are rejected for the reason as set forth above.

Double Patenting

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

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A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 14, 16, 17 and 25-31 are provisionally rejected under the judicially created doctrine of double patenting over claims 11, 14 and 15-18 of copending Application No. 09/004,706. This is a provisional double patenting rejection since the conflicting claims have not yet been patented.

The subject matter claimed in the instant application is fully disclosed in the referenced copending application and would be covered by any patent granted on that copending application since the referenced copending application and the instant application are claiming common subject matter, as follows:

The claims of the current application recite the features which are fully recited in the claimed invention of the copending application.

Furthermore, there is no apparent reason why applicant would be prevented from presenting claims corresponding to those of the instant application in the other copending application. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

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6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 14, 25, 26, 30 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Novis et al. (USPN: 5,867,795, cited in IDS Paper No. 8).

As per claims above, the claimed invention reads on Novis et al. as follows: Novis et al. discloses a portable display system (see figure 1) comprising a housing (11), a liquid crystal display (LCD) inherently including an array of pixel electrodes (a visual LCD display 20, col. 7, line 10. Also, at the time of the invention was made, it would have been obvious to recognize LCD device including an active matrix LCD device) carried by the housing, a lens (lens 44, col. 7, lines 44-46) that magnifies an image on the display and a card reader (a slot 16) within the housing that receives video input to be displayed on the display from a smart card or a memory card (a smart card 18, col. 3, lines 46-51) that docks with the card reader (figures 1 and 5, col. 3, lines 25-51 and col. 7, lines 40-66).

Novis et al. discloses all the subject matter claimed with the exception of the particular size of the housing and the particular operating frequency of the card reader. Absent a showing of criticality it would have been within the level of skill in the art and obvious to one having ordinary skill to engineering design the size of the housing and the operating frequency of the card reader as desired as was judicially recognized in re Rose, 105 USPQ 237 (CCPA 1955).

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Therefore, these claims are rejected for the reason as set forth above.

8. Claims 16, 17 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Novis et al. in view of Michel et al. (USPN: 5,579,165).

In regard to claim 16 as applied to claim 14 above, Novis et al. discloses the visual display including liquid crystal display device, but does not disclose expressly the display including a claimed light emitting diode.

However, Michel et al. discloses a portable display system comprising a LCD device including a LED device (a light emitting diode plate 6, figure 1, col. 22-40, col. 2, lines 28-32) for illuminating the array of pixel electrodes.

It would have been obvious to one of ordinary skill in the art to provide a LCD device of Novis et al. with a LED device of Michel et al. because such LED device would enhance the luminance of the screen so as to allow the user viewing the better image. Therefore, it would have been obvious to combine Michel et al. with Novis et al. to obtain the invention as specified in claim above.

In regard to claims 17 and 28 as applied to claim 16 above, Novis et al. in view of Michel et al. discloses the claimed invention except for the particular size of the array of pixel electrodes. Absent a showing of criticality it would have been within the level of skill in the art

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and obvious to one having ordinary skill to engineering design the size of the array of pixel electrodes as desired as was judicially recognized in re Rose, 105 USPQ 237 (CCPA 1955).

Therefore, these claims are rejected for the reason as set forth above.

9. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Novis et al. in view of Yamamoto et al. (USPN: 5,506,705).

In regard to claim 27 as applied to claim 14 above, Novis et al. discloses the visual display including liquid crystal display device, but does not disclose expressly that the LCD display is color sequential.

However, Yamamoto et al. discloses a portable display system such as a goggle type display apparatus comprising a color sequential LCD device (col. 10, lines 47-48).

It would have been obvious to one of ordinary skill in the art to substitute the LCD device of Novis et al. with the color sequential LCD of Yamamoto et al. because this would allow the user to view the image with significantly high realism as taught by Yomamoto et al. (col. 10, lines 63-65). Therefore, it would have been obvious to combine Yomamoto et al. with Novis et al. to obtain the invention as specified in claim above.

10. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Novis et al. in view of Michel et al. and further in view of Zavracky et al. (USPN: 5,206,749, cited in IDS entered as paper No. 5).

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In regard to claim 29 as applied to claim 16 above, Novis et al. in view of Michel et al. discloses the active LCD device, but does not disclose expressly the LCD display comprising an array of transistor circuits formed with single crystal silicon, and the array of transistor circuits being bonded to an optically transmissive substrate with an adhesive layer as claimed.

However, Zavracky et al. discloses a display system in which the LCD display panel comprising an array of transistor circuits formed with single crystal silicon, and the array of transistor circuits being bonded to an optically transmissive substrate with an adhesive layer as recited in claim above (see summary).

It would have been obvious to one of ordinary skill in the art to substitute the LCD panel of Novis et al. for a high quality LCD display panel of Zavracky et al. because such high quality LCD display panel would drive the image with desired speed and would reduce the cost of fabrication as taught by Zavracky et al. (col. 1, lines 53-56). Therefore, it would have been obvious to combine Zavracky et al. and Michel et al. with Novis et al. to obtain the invention as specified in claim above.

Response to Arguments

11. Applicant's arguments filed with respect to the IDS (entered as paper No. 5), page 5, line 27 – page 7, line 2, have been fully considered and it is persuasive, therefore, the Examiner agrees to consider all cited references.

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12. Applicant's arguments filed "Claim 14 ... allowed", page 7, last paragraph, have been fully considered but they are not persuasive, because the specification on page 45, line 25 describes a different portable display system such as a portable pager/display system shown in figures 28's, and there is no where in the specification which discloses **all** the portable display systems having the same size. Therefore, the rejection is maintained.

13. Applicant's arguments filed "Novis does not suggest card reader", page 8, lines 14-19, have been fully considered but they are not persuasive, because Novis obviously discloses the claimed invention as specified in claim 14 (see detailed rejection above).

Conclusion

14. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jimmy H. Nguyen whose telephone number is (703) 306-5422. The examiner can normally be reached on Monday - Thursday, 8:00 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on (703) 305-4938. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-9051 for regular communications and (703) 308-6606 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

JHN
January 9, 2001


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